

What is claimed is:

1. A water-dilutable polyester resin **ABCD** having a mass fraction of from 1 to 10 % of units derived from unsaturated cocondensed building blocks, an olefinic double bond content of from 10 to 2 000 mmol/kg, and a sulfonic acid group content of from 20 to 300 mmol/kg.
2. A water-dilutable polyester resin **ABCDE** obtained by polymerizing olefinically unsaturated monomers **E** in the presence of the polyester **ABCD** of claim 1, having a mass fraction of generated vinyl polymer of from 20 to 80 % in the modified polyester, and a sulfonic acid group content of from 4 to 240 mmol/kg.
3. The water-dilutable polyester resin as claimed in claim 1 or 2, comprising units derived from hydroxy-functional compounds **A** having on average at least two hydroxyl groups per molecule and from 2 to 20 carbon atoms.
4. The water-dilutable polyester resin as claimed in claim 1 or 2, comprising units derived from acids **B** having on average at least two acid groups per molecule and from 2 to 40 carbon atoms.
5. The water-dilutable polyester resin as claimed in claim 1 or 2, comprising a mass fraction of from 0.5 to 20 % of units derived from a compound **D** which in addition to at least one functional group which are incorporated into a polyester under condensation conditions and are selected from hydroxyl groups, carboxyl groups, and amino groups, contains at least one sulfonic acid group in the molecule.
6. The water-dilutable polyester resin as claimed in claim 1 or 2, comprising units derived from olefinically unsaturated compounds **C** containing at least one group which is reactive under condensation conditions with hydroxy-functional or acid-functional compounds and is selected from

hydroxyl groups, amino groups, carboxylic acid groups, sulfonic acid groups, and phosphonic acid groups and at least one polymerizable olefinic double bond.

5 7. The water-dilutable modified polyester resin **ABCDE** as claimed in claim 2, comprising units of olefinically unsaturated monomers **E**.

8. A process for preparing a water-dilutable modified polyester resin **ABCDE** as claimed in claim 2, which comprises polymerizing olefinically
10 unsaturated monomers **E** in the presence of a polyester resin **ABCD** as claimed in claim 1.

9. A coating composition comprising a polyester resin as claimed in claim 1 or 2.

15 10. A one-component coating composition comprising a polyester resin as claimed in claim 1 or 2 and an amino resin.